

CLAIMS

1. Device for producing a heated emulsion of a drink,
in particular milk, and air with the aid of a steam
5 jet, comprising a body (10) wherein there are
obtained at least one steam inlet (11), a drink
inlet (12), an air inlet (13) and a mixing chamber
(14) for the drink, air and steam, where said mixing
chamber communicates with said inlets and with a
10 hole (15) for delivering the emulsion, characterised
in that between the mixing chamber and the delivery
hole there are provided valve means capable of
rotating between an open position adapted for
placing the mixing chamber (14) in fluid
15 communication with the delivery hole (15) and a
closed position of said mixing chamber, wherein the
steam jet is forced to exit from the body passing
through the air and drink inlets, to sterilise the
device.
- 20 2. Device according to claim 1, wherein said valve
means comprise a pair of superimposed ceramic plates
(17, 17') capable of axially rotating with respect
to one another between the open position and the
closed position.

3. Device according to claim 2, wherein said plates exhibit respective fissures or openings (18, 18') obtained so as to be aligned, when the plates are in open position, and not aligned when the plates are in closed position.
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4. Device according to any one of the previous claims, wherein the body comprises a top portion (19) and a bottom portion (20) axially constrained with possibility of angular movements with respect to one another.
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5. Device according to claim 4, wherein the rotation of a portion of the body relative to the other is limited to an angle of hexagesimal 90°.
6. Device according to claims 2 and 4 or 5, wherein at least one plate is constrained at least angularly to a respective portion of the body.
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7. Device according to any one of claims from 2 to 6, wherein the plates are capable of rotating by hexagesimal 90° with respect to one another.
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8. Device according to claim 4 or 5, wherein one of the two portions exhibits a radial tooth (24) movable between two support shoulders (25) obtained in the other portion.
9. Device according to any one of the previous claims, wherein the air inlet is obtained in a cylindrical
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projection (30) of the body and is open outwards through a hole (31) obtained radially with respect to the main axis of said cylindrical projection.

10. Device according to claim 8, wherein around
5 said cylindrical projection there is mounted an annular element (33) bearing a radial hole (34), said annular element being capable of rotating on the cylindrical projection between an open position of the air inlet, wherein the radial holes of the
10 cylindrical projection and of the annular element are aligned, and a closed position of said inlet wherein said holes are not aligned.
11. Device according to any one of the previous claims, wherein the air inlet is provided with a
15 valve for regulating the air quantity to be let into the device.
12. Device according to claim 11, wherein said valve is a pin valve (32).
13. Device according to any one of the previous
20 claims, wherein the mixing chamber (14) exhibits a plurality of sections with an increasing diameter towards the emulsion delivery hole.
14. Device according to claim 9, wherein the valve means are housed in the section with the largest
25 diameter.

15. Device according to claim 10, wherein an insert (27) is placed to decrease the speed of the emulsion flow.

16. Device according to claim 11, wherein said
5 insert is provided with radial gaps (28).

17. Device according to claim 11 or 12, wherein said insert is closed at the bottom by a conical shaped bottom (29).

18. Device for producing a heated emulsion of a
10 drink, in particular milk, and air with the aid of a steam jet, comprising a body (10) wherein there are obtained at least one steam inlet (11), a drink inlet (12), an air inlet (13) and a mixing chamber (14) for the drink, air and steam, where the air
15 inlet is obtained in a cylindrical projection (30) of the body and is open outwards through a hole (31) obtained radially with respect to the main axis of said cylindrical projection, characterised in that around said cylindrical projection there is mounted
20 an annular element (33) bearing a radial hole (34), said annular element being capable of rotating on the cylindrical projection between an open position of the air inlet, wherein the radial holes of the cylindrical projection and of the annular element

are aligned, and a closed position of said inlet wherein said holes are not aligned.

19. Device according to claim 18, wherein the air inlet is associated with a valve for regulating the
5 air quantity to be let into the device.

20. Device according to claim 19, wherein said valve is a pin valve (32).